SIDDHARTH WAGH

Phone: +1-732-306-0838 (Cellular) *Address: 22 B, Cedar Lane, Highland Park, NJ 08904*
Email: swagh@cac.rutgers.edu *Web: http://www.eden.rutgers.edu/~swagh/*

OBJECTIVE Seeking an **entry-level full-time** position as a software engineer that will utilize my years of academic experience in application development and programming

EDUCATION

Jan 2010 **Rutgers University (RU)**, New Brunswick, NJ, USA
Master of Science (MS), Electrical and Computer Engineering (GPA: 3.7/4.0)

May 2007 **Veermata Jijabai Technological Institute (VJTI),** Mumbai University, India
Bachelor of Engineering (BE), Electronics Engineering

RELEVANT COURSEWORK

- Software Engineering of Web Applications
- Operating System Design
- Data Structures and Algorithms
- Programming in C/C++

RESEARCH

May 2008 – till date **Automated Virtual Machine Management and Resource Configuration**
Ongoing research at NSF funded CAC, Rutgers University under Dr. Manish Parashar

- Optimized configuration of system resources by studying CPU scheduling policies at fine granularity to gain efficient performance of web servers on guest VMs.
- Embedded C and Python scripts in Xen library to automate migration & manipulation of VMs.
- Hands-on experience working in Linux (xen kernel) and familiarity with InfiniBand architecture.

PROJECTS

Feb 2009 – May 2009 **Optimization of Knapsack Problems for Resource Management in Virtualized systems**

- Analyzed & implemented Greedy, HS Branch & Bound and Expanded Core algorithms in C to resolve knapsack problem of dynamic memory allocation for virtual machines in data centers.
- Installed optimization measures to expedite the process of resource allocation.

Sep 2008 - Dec 2008 **Software design of a Routing Protocol for multicasting in a small network**

- Designed a specification for a new routing protocol using modified RIP and extended forward forking mechanism for multicasting ability in a router.
- Implemented the design using multi-threaded programming in C++ for a small homogenous network of ~50 nodes.

Jan 2008 - May 2008 **Software Engineering of a web-based Stock Prediction Application**

- Wrote a PHP script for mining online stock prices and storing them in database using MySQL.
- Constructed a stock prediction application model using Neural Networks toolbox in MATLAB (linked with SQL database) to recommend buy, sell stock actions to clients.

CERTIFICATION

- Cisco Certified Network Associate (CCNA™)

TECHNICAL SKILLS

Languages: C, C++, Python, MATLAB, HTML, PHP, MySQL
Softwares: MATLAB, Simulink, Virtualization packages (Xen 3.0, libvirt, VMWare)
Operating systems: LINUX (Red Hat, Ubuntu), Microsoft Windows, DOS, MAC
Applications: MS Word, PowerPoint, Excel, Access, Adobe Photoshop, Corel Draw

INTERNSHIP

Feb 2007 – Mar 2007 **PANGEA3, Legal Database systems Pvt. Ltd.***, Mumbai, India (http://www.pangea3.com/)*

- Provided technical expertise as part-time engineer in a complex patent related litigation in USA. Gained vital team experience and knowledge on GPS and related technologies.

ACTIVITIES

Part-time Lecturer, Physics Department, Rutgers University, NJ (2008-09)
President, Indian Graduate Student Association, Rutgers University, NJ (2007-08)
Technical Head, IEEE Student Branch, VJTI, Mumbai (2006-07)
Part-time Swimming Instructor, New Horizons, Rutgers University, NJ (2009-10)